

Heidelberg Materials Quickcem cement

Technical data sheet

Heidelberg Materials Quickcem is manufactured to a proprietary technical specification and is a Portland cement containing special additives developed to give quick setting and hardening characteristics.

Heidelberg Materials Quickcem cement is produced using carefully selected raw materials and strict quality control throughout each stage of the manufacturing process to ensure a consistent final product is achieved.

Application

Heidelberg Materials Quickcem is an ideal cement for repair and maintenance applications where the increased rate of set and strength development are beneficial in both mortar and concrete, allowing normal services to be brought back into operation much sooner than with traditional Portland cement. Heidelberg Materials Quickcem cement is commonly used for a wide range of applications. These applications cover but are not limited to:

- Fixing manhole covers
- Patch repairs
- Concrete paths/steps
- Repairing rendering and floor screeds
- Fixing fence posts and railings

Quality

Heidelberg Materials Quickcem cement is manufactured under a system of factory production control, based on ISO 9001. Constant monitoring of all components ensures consistent quality. At present there is no appropriate British standard for this product.

Compatibility

Heidelberg Materials Quickcem cement is suitable for use with a wide range of additives and admixtures to extend the properties and uses of concretes, mortars, renders and screeds. It is recommended that trial mixes are carried out to determine optimum proportions.



Heidelberg Materials Quickcem cement

Technical data sheet

Mix design

Mix designs need to be adapted to suit individual circumstances. It is strongly recommended that trial mixes are carried out prior to the commencement of work to ensure that the mix design and material combinations meet the requirements of the specification and method of use. Depending on the mix used and the ambient temperature, workability will be retained for between 10 and 30 minutes. It is important that the concrete, mortar or screed is made without prolonged mixing and is placed and fully compacted as soon as possible after mixing.

Care must be taken with water addition, too much water can drastically affect the setting and strength gain of mortar or concrete produced.

For mix designs reference should be made but not limited to the following documents:

- **BS 8500:** Specification for constituent materials and concrete.
- **BS EN 998:** Specification for mortar for masonry. Rendering and plastering mortar.

Typical mixes for concrete applications

Quickcem Concrete	Proportions by volume	Quickcem Concrete	Proportions by volume
Quickcem	1	Quickcem	1
Concrete Sand	2	Combine sand and coarse aggregate (Ballast)	4
4/20mm aggregate	3		

Typical mixes for mortar applications

Mortar designation	Proportions by volume Quickcem : Building Sand	Mortar class that may be assumed	Suitable for use in environmental condition
(i)	1:3	M12	Severe (S)
(ii)	1:3 to 1:4	M6	Severe (S)
(iii)	1:5 to 1:6	M4	Moderate (M)
(iv)	1:7 to 1:8	M2	Passive (P)

NOTE Small amounts of air-entraining mortar plasticiser may be necessary

Heidelberg Materials Quickcem cement

Technical data sheet

Guidance for use

- The rapid setting nature of this product makes it unsuitable for large concrete slabs or large screed areas as they cannot normally be placed and finished in the available time.
- Careful addition of water is required to maintain the fast setting properties of this product.
- The amount of materials mixed in any one operation should be small enough to ensure that all the material can be used and all equipment thoroughly cleaned before the mix has set.
- As a general rule, concrete should be placed within the range of 5°C to 30°C.
- In cold weather, freshly poured concrete/mortar should be protected to avoid frost damage.
- Heidelberg Materials Cement cannot be held responsible for poor workmanship.
- Quickcem is made from natural materials. Therefore slight variations in colour may occur.
- To avoid premature deterioration of the product please follow the correct storage requirements given below.

Availability

Heidelberg Materials Quickcem cement is supplied in 25kg bags throughout the UK.

Storage

Bags should be stored unopened, clear of the ground, in cool dry conditions and protected from excessive draft and all sources of moisture. The maximum shelf life of Quickcem cement is 12 months from date of manufacture.

Hexavalent chromium (VI)

The soluble chromium (VI) content is limited to a maximum of 2ppm. The chromium (VI) content is determined in accordance with EN 196-10.

Health and safety

Cement causes skin, eye and respiratory irritation, severe burns and dermatitis. Always wear suitable personal protective equipment (PPE) and refer to the full Material Safety Data Sheet for further information.

Technical support and further information

Please refer to the Material Safety Data Sheet for full health and safety information

For further advice please contact Heidelberg Materials cement technical support on **0330 123 4525** or **cement@uk.heidelbergmaterials.com**

Further copies of this technical data sheet may be obtained from www.heidelbergmaterials.co.uk